

Appendix E T-REX Output

Asparagus- 4 lb ai/A

TREX MODEL INPUTS			
These values will be used in the calculation of exposure estimates for foliar, granular, liquid and/or seed applications of pesticides.			
Chemical Name:	Linuron		
Use:	Asparagus		
Product name and form:	DREXEL LINURON 4L WEED KILLER		
% A.I. (leading zero must be entered for formulations <1% a.i.):	100.00%		
Application Rate (lbs/A):	4		
Half-life (days):	35		
Application Interval (days):			
Number of Applications:	1		
Note: Sources of wildlife diet are assumed to be available for less than one year for this model.			
Endpoints			
Avian			
Indicate test species below			
LD50 (mg/kg-bw)	940.00	Bobwhite quail	▼
LC50 (mg/kg-diet)	1700.00	Bobwhite quail	▼
NOAEL (mg/kg-bw)		Mallard duck	▼
NOAEC (mg/kg-diet)	100.00	Bobwhite quail	▼
Enter the Mineau et al. Scaling Factor		1.15	
Mammals			
LD50 (mg/kg-bw)	2600.00		
LC50 (mg/kg-diet)			
Reported Chronic Endpoint	0.74	mg/kg-bw	▼
Is dietary concentration (mg/kg-diet) reported from the available chronic mammal study? (yes or no)	yes		
Enter dietary concentration (mg/kg-diet)	12.50		
Estimated Chronic Diet Concentration Equivalent to Reported Chronic Daily Dose	12.5	mg/kg-diet based on standard FDA lab rat conversion	

Summary of Risk Quotient Calculations Based on Upper Bound Kenaga EECs

Table X. Upper Bound Kenaga, Acute Avian Dose-Based Risk Quotients									
Size Class (grams)	Adjusted LD50	EECs and RQs							
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
20	677.20	1093.34	1.61	501.12	0.74	615.01	0.91	68.33	0.10
100	862.11	623.47	0.72	285.76	0.33	350.70	0.41	38.97	0.05
1000	1217.77	279.14	0.23	127.94	0.11	157.01	0.13	17.45	0.01

Table X. Upper Bound Kenaga, Subacute Avian Dietary Based Risk Quotients								
LC50	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
1700	960.00	0.56	440.00	0.26	540.00	0.32	60.00	0.04

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Avian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
100	960.00	9.60	440.00	4.40	540.00	5.40	60.00	0.60

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Acute Mammalian Dose-Based Risk Quotients		
Size	Adjusted	EECs and RQs

Class (grams)	LD50	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	5714.36	915.29	0.16	419.51	0.07	514.85	0.09	57.21	0.01	12.71	0.00
35	4623.53	632.59	0.14	289.93	0.06	355.83	0.08	39.54	0.01	8.79	0.00
1000	1999.82	146.67	0.07	67.22	0.03	82.50	0.04	9.17	0.00	2.04	0.00

Table X. Upper Bound Kenaga, Acute Mammalian Dietary Based Risk Quotients								
LC50 (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
0	960.00	#####	440.00	#####	540.00	#####	60.00	#####

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
13	960.00	76.80	440.00	35.20	540.00	43.20	60.00	4.80

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dose-Based Risk Quotients											
Size Class (grams)	Adjusted NOAEL	EECs and RQs									
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	1.63	915.29	562.77	419.51	257.94	514.85	316.56	57.21	35.17	12.71	7.82
35	1.32	632.59	480.71	289.93	220.33	355.83	270.40	39.54	30.04	8.79	6.68
1000	0.57	146.67	257.68	67.22	118.10	82.50	144.95	9.17	16.11	2.04	3.58

Carrot, Corn, Parsnip, Soybean – 1.5 lb ai/A

TREX MODEL INPUTS

These values will be used in the calculation of exposure estimates for foliar, granular, liquid and/or seed applications of pesticides.

Chemical Name:	LINURON
Use:	CARROT, corn, parsnip, soybean
Product name and form:	DREXE LINURON 4L WEED KILLER
% A.I. (leading zero must be entered for formulations <1% a.i.):	100.00%
Application Rate (lbs/A):	1.5
Half-life (days):	35
Application Interval (days):	
Number of Applications:	1

Note: Sources of wildlife diet are assumed to be available for less than one year for this model.

Endpoints

Avian

Indicate test species below

LD50 (mg/kg-bw)	940.00	Bobwhite quail	▼
LC50 (mg/kg-diet)	1700.00	Bobwhite quail	▼
NOAEL (mg/kg-bw)		Mallard duck	▼
NOAEC (mg/kg-diet)	100.00	Bobwhite quail	▼

Enter the Mineau et al. Scaling Factor 1.15

Mammals

LD50 (mg/kg-bw)	2600.00	
LC50 (mg/kg-diet)		
Reported Chronic Endpoint	0.74	mg/kg-bw ▼
Is dietary concentration (mg/kg-diet) reported from the available chronic mammal study? (yes or no)	yes	
Enter dietary concentration (mg/kg-diet)	12.50	
Estimated Chronic Diet Concentration Equivalent to Reported Chronic Daily Dose	12.5	mg/kg-diet based on standard FDA lab rat conversion

Summary of Risk Quotient Calculations Based on Upper Bound Kenaga EECs

Table X. Upper Bound Kenaga, Acute Avian Dose-Based Risk Quotients									
Size Class (grams)	Adjusted LD50	EECs and RQs							
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
20	677.20	410.00	0.61	187.92	0.28	230.63	0.34	25.63	0.04
100	862.11	233.80	0.27	107.16	0.12	131.51	0.15	14.61	0.02
1000	1217.77	104.68	0.09	47.98	0.04	58.88	0.05	6.54	0.01

Table X. Upper Bound Kenaga, Subacute Avian Dietary Based Risk Quotients								
LC50	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
1700	360.00	0.21	165.00	0.10	202.50	0.12	22.50	0.01

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Avian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
100	360.00	3.60	165.00	1.65	202.50	2.03	22.50	0.23

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Acute Mammalian Dose-Based Risk Quotients											
Size Class (grams)	Adjusted LD50	EECs and RQs									
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	5714.36	343.23	0.06	157.31	0.03	193.07	0.03	21.45	0.00	4.77	0.00
35	4623.53	237.22	0.05	108.73	0.02	133.44	0.03	14.83	0.00	3.29	0.00

1000	1999.82	55.00	0.03	25.21	0.01	30.94	0.02	3.44	0.00	0.76	0.00
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Table X. Upper Bound Kenaga, Acute Mammalian Dietary Based Risk Quotients								
LC50 (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
0	360.00	#####	165.00	#####	202.50	#####	22.50	#####

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
13	360.00	28.80	165.00	13.20	202.50	16.20	22.50	1.80

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dose-Based Risk Quotients											
Size Class (grams)	Adjusted NOAEL	EECs and RQs									
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	1.63	343.23	211.04	157.31	96.73	193.07	118.71	21.45	13.19	4.77	2.93
35	1.32	237.22	180.27	108.73	82.62	133.44	101.40	14.83	11.27	3.29	2.50
1000	0.57	55.00	96.63	25.21	44.29	30.94	54.35	3.44	6.04	0.76	1.34

Celery, Kenaf, Sorghum, Ornamental Plants – 1.0 lb ai/A

TREX MODEL INPUTS

These values will be used in the calculation of exposure estimates for foliar, granular, liquid and/or seed applications of pesticides.

Chemical Name:	Linuron
Use:	Celery, kenaf, sorghum, ornamental plants
Product name and form:	Linex 50% DF
% A.I. (leading zero must be entered for formulations <1% a.i.):	100.00%
Application Rate (lbs/A):	1
Half-life (days):	35
Application Interval (days):	
Number of Applications:	1

Note: Sources of wildlife diet are assumed to be available for less than one year for this model.

Endpoints

Avian

Indicate test species below

LD50 (mg/kg-bw)	940.00	Bobwhite quail	▼
LC50 (mg/kg-diet)	1700.00	Mallard duck	▼
NOAEL (mg/kg-bw)		Mallard duck	▼
NOAEC (mg/kg-diet)	100.00	Bobwhite quail	▼

Enter the Mineau et al. Scaling Factor 1.15

Mammals

LD50 (mg/kg-bw)	2600.00	
LC50 (mg/kg-diet)		
Reported Chronic Endpoint	0.74	mg/kg-bw ▼
Is dietary concentration (mg/kg-diet) reported from the available chronic mammal study? (yes or no)	yes	
Enter dietary concentration (mg/kg-diet)	12.50	
Estimated Chronic Diet Concentration Equivalent to Reported Chronic Daily Dose	12.5	mg/kg-diet based on standard FDA lab rat conversion

Summary of Risk Quotient Calculations Based on Upper Bound Kenaga EECs

Table X. Upper Bound Kenaga, Acute Avian Dose-Based Risk Quotients									
Size Class (grams)	Adjusted LD50	EECs and RQs							
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
20	677.20	273.34	0.40	125.28	0.18	153.75	0.23	17.08	0.03
100	862.11	155.87	0.18	71.44	0.08	87.68	0.10	9.74	0.01
1000	1217.77	69.78	0.06	31.98	0.03	39.25	0.03	4.36	0.00

Table X. Upper Bound Kenaga, Subacute Avian Dietary Based Risk Quotients								
LC50	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
1700	240.00	0.14	110.00	0.06	135.00	0.08	15.00	0.01

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Avian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
100	240.00	2.40	110.00	1.10	135.00	1.35	15.00	0.15

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Acute Mammalian Dose-Based Risk Quotients						
Size Class (grams)	Adjusted LD50	EECs and RQs				
		Short Grass	Tall Grass	Broadleaf Plants/ Small Insects	Fruits/Pods/ Seeds/ Large Insects	Granivore

		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	5714.36	228.82	0.04	104.88	0.02	128.71	0.02	14.30	0.00	3.18	0.00
35	4623.53	158.15	0.03	72.48	0.02	88.96	0.02	9.88	0.00	2.20	0.00
1000	1999.82	36.67	0.02	16.81	0.01	20.63	0.01	2.29	0.00	0.51	0.00

Table X. Upper Bound Kenaga, Acute Mammalian Dietary Based Risk Quotients									
LC50 (ppm)	EECs and RQs								
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	
0	240.00	#####	110.00	#####	135.00	#####	15.00	#####	

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dietary Based Risk Quotients									
NOAEC (ppm)	EECs and RQs								
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	
13	240.00	19.20	110.00	8.80	135.00	10.80	15.00	1.20	

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dose-Based Risk Quotients											
Size Class (grams)	Adjusted NOAEL	EECs and RQs									
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	1.63	228.82	140.69	104.88	64.48	128.71	79.14	14.30	8.79	3.18	1.95
35	1.32	158.15	120.18	72.48	55.08	88.96	67.60	9.88	7.51	2.20	1.67
1000	0.57	36.67	64.42	16.81	29.53	20.63	36.24	2.29	4.03	0.51	0.89

Rights-of-Way – 3 lb ai/A

TREX MODEL INPUTS

These values will be used in the calculation of exposure estimates for foliar, granular, liquid and/or seed applications of pesticides.

Chemical Name:	Linuron
Use:	Right of Way
Product name and form:	Linuron 4L
% A.I. (leading zero must be entered for formulations <1% a.i.):	100.00%
Application Rate (lbs/A):	3
Half-life (days):	35
Application Interval (days):	
Number of Applications:	1

Note: Sources of wildlife diet are assumed to be available for less than one year for this model.

Endpoints

Avian

Indicate test species below

LD50 (mg/kg-bw)	940.00	Bobwhite quail	▼
LC50 (mg/kg-diet)	1700.00	Bobwhite quail	▼
NOAEL (mg/kg-bw)		Mallard duck	▼
NOAEC (mg/kg-diet)	100.00	Bobwhite quail	▼

Enter the Mineau et al. Scaling Factor 1.15

Mammals

LD50 (mg/kg-bw)	2600.00	
LC50 (mg/kg-diet)		
Reported Chronic Endpoint	0.74	mg/kg-bw ▼

Is dietary concentration (mg/kg-diet) reported from the available chronic mammal study? (yes or no)

yes

Enter dietary concentration (mg/kg-diet)

12.50

Estimated Chronic Diet Concentration Equivalent to Reported Chronic Daily Dose

12.5

mg/kg-diet based on standard FDA lab rat conversion

Summary of Risk Quotient Calculations Based on Upper Bound Kenaga EECs

Table X. Upper Bound Kenaga, Acute Avian Dose-Based Risk Quotients									
Size Class (grams)	Adjusted LD50	EECs and RQs							
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
20	677.20	820.01	1.21	375.84	0.55	461.25	0.68	51.25	0.08
100	862.11	467.60	0.54	214.32	0.25	263.03	0.31	29.23	0.03
1000	1217.77	209.35	0.17	95.95	0.08	117.76	0.10	13.08	0.01

Table X. Upper Bound Kenaga, Subacute Avian Dietary Based Risk Quotients								
LC50	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
1700	720.00	0.42	330.00	0.19	405.00	0.24	45.00	0.03

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Avian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
100	720.00	7.20	330.00	3.30	405.00	4.05	45.00	0.45

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Acute Mammalian Dose-Based Risk Quotients		
Size	Adjusted	EECs and RQs

Class (grams)	LD50	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	5714.36	686.46	0.12	314.63	0.06	386.14	0.07	42.90	0.01	9.53	0.00
35	4623.53	474.44	0.10	217.45	0.05	266.87	0.06	29.65	0.01	6.59	0.00
1000	1999.82	110.00	0.06	50.42	0.03	61.88	0.03	6.88	0.00	1.53	0.00

Table X. Upper Bound Kenaga, Acute Mammalian Dietary Based Risk Quotients								
LC50 (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
0	720.00	#####	330.00	#####	405.00	#####	45.00	#####

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dietary Based Risk Quotients								
NOAEC (ppm)	EECs and RQs							
	Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects	
	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
13	720.00	57.60	330.00	26.40	405.00	32.40	45.00	3.60

Size class not used for dietary risk quotients

Table X. Upper Bound Kenaga, Chronic Mammalian Dose-Based Risk Quotients											
Size Class (grams)	Adjusted NOAEL	EECs and RQs									
		Short Grass		Tall Grass		Broadleaf Plants/ Small Insects		Fruits/Pods/ Seeds/ Large Insects		Granivore	
		EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ	EEC	RQ
15	1.63	686.46	422.08	314.63	193.45	386.14	237.42	42.90	26.38	9.53	5.86
35	1.32	474.44	360.54	217.45	165.25	266.87	202.80	29.65	22.53	6.59	5.01
1000	0.57	110.00	193.26	50.42	88.58	61.88	108.71	6.88	12.08	1.53	2.68